

a3 New matter

44. The polypeptide of claim 30 which is glycosylated in a pattern other than native glycosylation. -

*112.2nd
fused.*

*2.101
16.2*

REMARKS

Formal Matters:

The specification is amended to add ATCC deposit numbers, insert the current ATCC address, and correct inadvertant typographical errors. No new matter is added by the amendments to the specification.

Claims 30-32 and new claims 39-44 are pending in the application. Claims 1-28 and 33-38 are canceled without prejudice to later prosecution and in compliance with the restriction requirement of Paper No. 7. Amendment to claim 30 and new claims 39-44 is supported in the originally filed specification and claims, such as at page 84, line 2 to page 85, line 15; page 85, line 17 to page 87, line 9; Fig. 5; SEQ ID NO:4; and ATCC deposits 209155-209157, for example. No new matter is added by the amendments to the claims.

Rejection Under 35 U.S.C. § 112, Second Paragraph

Claims 29 and 31-32 were rejected under section 112, second paragraph, because the claims are allegedly incomplete for depending from non-elected claim 1 and because claim 1 allegedly contains an indefinite and confusing term "an amino acid sequence encoding an EGF-like domain." Applicants respectfully submit that the rejection is moot due to amendments discussed below. Withdrawal of the rejection under section 112, second paragraph is respectfully requested.

Rejection Under 35 U.S.C. § 112, First Paragraph

Claims 29 and 31-32 were rejected under section 112, second paragraph, because the specification is allegedly not enabling for claims drawn to an immunoadhesin comprising a polypeptide comprising an amino acid sequence of an EGF-like domain and having the binding characteristics of NRG3, wherein the polypeptide is fused to an immunoglobulin constant domain.

Applicants respectfully traverse the rejection as applied and as it might be applied to the currently pending claims for the reasons provided below.

Applicants respectfully submit that a polypeptide having the binding characteristics of NRG3 and an EGF-like domain is enabled by the specification. First, the binding characteristics are fully described in the specification at pages 84-87 as noted in the Formal Matters section. Second, an EGF-like domain is readily determined based on the information provided in Applicants' specification. A polypeptide having these characteristics and fused to an immunoglobulin is, therefore, readily practiced by one of ordinary skill in the art after reading Applicants' disclosure.

Without acquiescing to the rejection and merely to expedite allowance of the claims, Applicants have amended the claims to recite the EGF-like domain of SEQ ID NO:4 and binding characteristics including binding to ErbB4 and activating receptor tyrosine phosphorylation of ErbB4.

Applicants respectfully submit that the claims are in condition for allowance, which action is requested.

Rejection Under 35 U.S.C. § 102(b) (Ho et al.)

Claims 29 and 31-32 were rejected under section 102(b) as allegedly being anticipated by Wei-Hsien Ho et al. (WO 96/15244, of record) which describes sensory and motor neuron derived factor (SMDF), a protein comprising an EGF-like domain. Applicants respectfully traverse the rejection as applied and as it might be applied to the currently pending claims for the reasons provided below.

Applicants claim an immunoadhesin comprising a polypeptide having the binding characteristics of ErbB4 binding and ErbB4 receptor tyrosine phosphorylation and an EGF-like domain of SEQ ID NO:4. Neither of these limitations is disclosed in Ho et al. Applicants respectfully submit that the claims are in condition for allowance, which action is requested.

Rejection Under 35 U.S.C. § 102(e) (Capon et al.)

Claims 29 and 31-32 were rejected under section 102(e) as allegedly being anticipated by Capon et al. (USPN 5,714,147, of record) which describes a lymphocyte cell surface glycoprotein (referred to as LHR), a protein comprising an EGF-like domain. Applicants respectfully traverse the rejection as applied and as it might be applied to the currently pending claims for the reasons provided below.

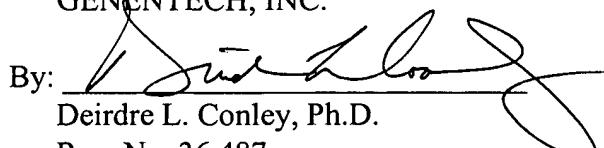
Applicants claim an immunoadhesin comprising a polypeptide having the binding characteristics of ErbB4 binding and ErbB4 receptor tyrosine phosphorylation and an EGF-like domain of SEQ ID NO:4. Neither of these limitations is disclosed in Capon et al. Applicants respectfully submit that the claims are in condition for allowance, which action is requested.

CONCLUSION

Applicants respectfully request that the foregoing amendments be considered and entered in the application. It is respectfully submitted that all grounds for rejection have been removed and the claims are now in condition for allowance. It is therefore earnestly solicited that solicited that such a final favorable disposition is made.

This response/amendment is submitted with a transmittal letter and petition for a two-month extension of time and fees. In the unlikely event that this document is separated from the transmittal letter, Applicants hereby petition the Commissioner to authorize charging our Deposit Account 07-0630 for any fees required or credits due and any extensions of time necessary to maintain the pendency of this application.

Respectfully submitted,
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